

Amendments to the claims (This listing of claims replaces all prior versions):

1. (currently amended) A method comprising
in a cell having a first sector and at least one other sector of a cellular wireless communication system,
determining a current state of transmissions in at least one of the other sectors of the cell or a sector in another cell; and
altering the ~~SIR~~ signal-to-interference ratio of at least one user in the first sector of the cell by temporarily reducing transmissions on a forward link in at least one of the other sectors of the cell or a sector in another cell in accordance with a pattern that is based on the determined current state of transmissions.
2. (original) The method of claim 1 in which the pattern is organized in a sequence of time slots and the pattern defines which of the sectors has transmissions turned on or off in each of the time slots.
3. (cancelled) ~~The method of claim 1 in which the pattern comprises a predetermined fixed pattern that is repeated as time passes.~~
4. (cancelled) ~~The method of claim 1 also including
determining a current state of transmissions in at least one of the sectors of the cell or a sector in another cell, and
setting the pattern dynamically based on the determined state of the transmissions.~~
5. (currently amended) The method of claim [4] 1 in which the current state of transmissions includes ~~the scheduling~~ a status of transmissions scheduled in neighboring sectors in the cell or in one or more other cells.

6. (currently amended) The method of claim 5 in which the current state of transmissions includes ~~the~~ transmission rates of some neighbor sectors.
7. (currently amended) The method of claim [4] 1 in which the current state of transmissions includes ~~the~~ a next time slot usage for one or more sectors.
8. (currently amended) The method of claim [4] 1 in which the current state of transmissions includes ~~the~~ a forward link SIR signal-to-interference ratio of users in one or more sectors.
9. (currently amended) The method of claim [4] 1 in which the current state of transmissions includes user location.
10. (currently amended) The method of claim [4] 1 in which the current state of transmissions includes a fairness setting for one or more users.
11. (currently amended) The method of claim [4] 1 in which the current state of transmissions includes an application type of one or more users user or QoS a quality of service level for one or more users.
12. (original) The method of claim 1 in which temporarily reducing the transmissions comprises turning transmissions on and off in selected sectors according to the pattern.
13. (original) The method of claim 12 in which the pattern includes turning off transmissions in other sectors more frequently to help users having lower communication rates.
14. (original) The method of claim 1 also including arranging a frequency reuse factor of one or higher in the wireless system.

15. (original) The method of claim 1 in which the wireless system comprises IxEV-DO.
16. (currently amended) Apparatus comprising
wireless transmission facilities for more than one sector of a cell, and
control facilities connected to the wireless transmission facilities and configured to:
determine a current state of transmission for one or more of the sectors serviced by
the wireless transmission facilities;
determine a transmission pattern for one or more of the sectors serviced by the
wireless transmission facilities based on the determined current state of transmissions; and
alter the ~~SIR~~ signal-to-interference ratio of at least one user in a sector of the cell by
temporarily reducing transmissions on a forward link in at least one other sector of the cell or a
sector in another cell in accordance with a the pattern.
17. (original) The apparatus of claim 16 in which the control facilities comprise sector
controllers for controlling the wireless transmission facilities for the respective sectors.
18. (cancelled) ~~A medium bearing intelligence configured to enable a machine to effect~~
~~the actions that comprise:~~
~~in a cell of a cellular wireless communication system, altering the SIR of at least one~~
~~user in a sector of the cell by temporarily reducing transmissions on a forward link in at least one~~
~~other sector of the cell or a sector in another cell in accordance with a pattern.~~
19. (currently amended) Apparatus comprising
a sector controller adapted to control transmissions in a sector of a cell of a wireless
communication system and to communicate with other sector controllers in the cell or in one or
more other cells to coordinate the turning on and off of transmissions in at least one of the
sectors based on a current transmission state in at least another one of the sectors.

20. (new) A method for transmitting encoded data packets to one or more mobile stations in a communication system including a cell that has sectors serving at least partially different geographic areas, the method comprising:

transmitting in a first sector an encoded data packet in one or more time slots to a mobile station;

reducing transmission power in a second sector during one or more of the time slots in which the first sector transmits the data packet to the mobile station;

decoding at the mobile station the encoded data packet after each time slot;

transmitting by the mobile station a signal indicating acknowledgment of the packet reception when the decoding of the packet is successful; and

in response to receiving the acknowledgement signal, ceasing transmission of the data packet in the first sector in subsequent time slots.

21. (new) The method of claim 20 wherein transmitting the data packet in the first sector while reducing transmission power in the second sector is controlled according to a pattern.

22. (new) The method of claim 21 wherein the pattern is organized in a sequence of time slots and the pattern defines which sectors transmit data packets and which sectors reduce transmission power in each of the time slots.

23. (new) The method of claim 21 wherein the pattern is a predetermined pattern repeated over time.

24. (new) The method of claim 21 further comprising:

determining a current state of transmissions in each of the sectors; and

determining the pattern based on the determined current state of transmissions.

25. (new) The method of claim 24 wherein the state of transmissions includes information about a scheduling status of transmissions in neighboring sectors.
26. (new) The method of claim 25 wherein the state of transmissions includes information about current transmission rates of a sector.
27. (new) The method of claim 24 wherein the state of transmissions includes information about a next time slot scheduled for transmission in a sector.
28. (new) The method of claim 24 wherein the state of transmissions includes information about a forward link signal-to-interference ratio measured at a mobile station located within a sector.
29. (new) The method of claim 24 wherein the state of transmissions includes information about an estimated location of a user scheduled to receive a data packet in a sector
30. (new) The method of claim 24 wherein the state of transmissions includes a fairness parameter for a user scheduled to receive a data packet in a sector.
31. (new) The method of claim 24 wherein the state of transmissions includes information about an application type of a user scheduled to receive data packets in a sector.
32. (new) The method of claim 24 wherein the state of transmissions includes information about a quality of service level of a user scheduled to receive data packets in a sector.
33. (new) The method of claim 20 further comprising:
arranging a frequency reuse factor of one or higher in the communication system.

34. (new) The method of claim 20 wherein the second sector does not transmit any data packets while its transmission power is reduced.

35. (new) The method of claim 20 wherein the second sector transmits data packets at a reduced transmission rate while its transmission power is reduced.

36. (new) The method of claim 1, further comprising:
estimating a signal-to-interference-and-noise ratio based on information received from the mobile station; and
determining an encoding and modulation scheme for the data packet based on the estimated signal-to-interference-and-noise ratio.

37. (new) The method of claim 36 wherein each sector transmits a pilot signal and the received information comprises information indicating a strength of one or more of the pilot signals detected by the mobile station.

38. (new) The method of claim 20 wherein reducing transmission in a sector comprising suppressing transmission in the sector.